

WHAT IS CLAIMED IS:

1. A method of automatically distributing operational information between telecommunication servers in a mobile communication network, said method comprising the steps of:

5 defining for a first telecommunication server in the network, at least one neighboring telecommunication server;

performing a procedure that changes the first server's operational information;

10 upon completion of the procedure, automatically sending the first server's operational information from the first server to the first server's neighboring servers;

receiving and storing the first server's operational information in each of the first server's neighboring servers; and

15 upon receiving the first server's operational information, sending operational information for each of the first server's neighboring servers from the neighboring servers to the first server.

2. The method of claim 1, wherein the operational information includes capability and configuration information.

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3. The method of claim 2, wherein the telecommunication servers are Mobile Switching Centers (MSCs), and the step of performing a procedure that changes the first server's operational information includes starting-up a first MSC.

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4. A method of reducing signaling and processing requirements in a mobile communication network having a plurality of neighboring telecommunication servers, said method comprising the steps of:

30 automatically distributing operational information between the server's whenever an operational capability of one of the servers is changed;

initiating a service in a first server; and

upon initiating the service in the first server, sending to servers neighboring the first server, only information that the operational information stored in the first server indicates is supported by the neighboring servers.

- 5 5. The method of claim 4, wherein the telecommunication servers are Mobile Switching Centers (MSCs), and the step of automatically distributing operational information between the servers whenever an operational capability of one of the servers is changed includes the steps of:
- starting-up one of the MSCs;
- 10 automatically sending the operational information for the start-up MSC, from the start-up MSC to MSCs neighboring the start-up MSC;
- receiving and storing the start-up MSC's operational information in each of the neighboring MSCs; and
- upon receiving the start-up MSC's operational information, sending
- 15 operational information for each of the neighboring MSCs from the neighboring MSCs to the start-up MSC.

6. The method of claim 5, wherein the step of sending to neighboring MSCs, only information that the operational information indicates is supported by
- 20 the neighboring MSCs, includes the steps of:
- determining by the MSC that initiates the service, whether a given neighboring MSC supports the service, based upon the operational information for the given neighboring MSC that the initiating MSC has received from the given neighboring MSC;
- 25 upon determining that the given neighboring MSC does not support the service, sending from the initiating MSC to the given neighboring MSC, only information that is supported by the given neighboring MSC; and
- upon determining that the given neighboring MSC supports the service, sending from the initiating MSC to the given neighboring MSC, information
- 30 relating to the initiated service.

7. The method of claim 4, wherein the telecommunication servers are Mobile Switching Centers (MSCs), and the operational information includes capability and configuration information for the MSCs.

5 8. The method of claim 7, wherein the capability and configuration information sent by a given MSC includes an indication of a version of an industry standard with which the given MSC is compliant.

10 9. The method of claim 7, wherein the capability and configuration information sent by a given MSC includes an indication of a version of an industry standard with which the given MSC is compliant, together with exceptions for any capabilities of the version of the standard that are not supported by the given MSC.

15 10. A telecommunication server that automatically distributes operational information for the server to neighboring telecommunication servers in a mobile communication network, said telecommunication server comprising:

20 a communication signaling mechanism that automatically sends the server's operational information to at least one neighboring server upon start-up of the server, and receives in return, operational information for the at least one neighboring server; and

means for storing the operational information for the at least one neighboring server.

25 11. The telecommunication server of claim 10, wherein the server is a Mobile Switching Center (MSC), and the communication signaling mechanism sends the MSC's operational information to at least one neighboring MSC upon start-up of the MSC.

30 12. The telecommunication server of claim 11, wherein the operational information includes capability and configuration information for the MSC.

13. The MSC of claim 12, wherein the communication signaling mechanism also automatically sends the MSC's capability and configuration information to the at least one neighboring MSC whenever an operational capability of the MSC is changed.

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14. The MSC of claim 12, further comprising:

means for initiating a service;

means for determining from the stored capability and configuration information for the at least one neighboring MSC, which information related to
10 the initiated service is supported by the at least one neighboring MSC; and

means for sending to the at least one neighboring MSC, only the service-related information that is supported by the at least one neighboring MSC.